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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PETER J. POTREBIC

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Appeal 2008-2335  
Application 09/781,110  
Technology Center 2600

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Decided: August 27, 2008

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Before MAHSHID D. SAADAT, JOHN A. JEFFERY, and CARLA M.  
KRIVAK, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-5, 9-23, 25, 26, and 28-35.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

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<sup>1</sup> After the Appeal Brief was filed, the Examiner entered an amendment filed on June 28, 2007 that corrected an apparent typographical error in claim 1.

## STATEMENT OF THE CASE

Appellant invented a system and method for recording “fragmented” programs that are aired over multiple days (e.g., mini-series, ongoing sporting events, etc.). Using electronic program guide (EPG) data, the system automatically identifies fragments of one or more programs that are related and sequentially records each of the identified fragments. Thus, to record shows associated with a particular fragmented program, viewers need only identify the fragmented program without having to identify the date and time of each airing.<sup>2</sup> Claims 1 and 21 are illustrative:

1. In an entertainment system that includes a video recording apparatus, a method for automatically recording a fragmented program that includes a series of fragments that are temporally separated from each other and that have been designated as being related one to another wherein each fragment is broadcast to the entertainment system as a separate and independent program from other related fragments, the method comprising the acts of:

providing a list of categories that include one or more fragmented programs for selection to a user;

upon receiving user selection of one of the categories, identifying with electronic program guide data each of one or more fragmented programs that corresponds to the selected category and that is scheduled to be displayed during a specific period of time, wherein the electronic program guide data used to identify the one or more fragmented programs includes a unique identifier that is assigned to each fragment in a group of fragments that are designated by a network as being related, such that the unique identifier is common to each fragment within a corresponding grouping of programs, which are identified by the network as being related, and such that each fragment corresponding to the fragmented program grouping has a same unique identifier that is distinguished and independent from a program title;

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<sup>2</sup> See generally Spec. 4:2-6:4.

displaying in a fragmented program list, each of the identified one or more fragmented programs corresponding to the selected category, wherein the fragmented program list only includes the identified one or more fragmented programs;

receiving user input requesting one or more of the displayed fragmented programs in the list to be recorded without requiring the user to separately identify each of the fragments associated with the fragmented programs;

in response to said user input selecting one or more of the displayed fragmented programs, examining the electronic program guide data and identifying each of the fragments corresponding to the selected one or more fragmented programs for each of the identified fragments, automatically determining a start time for the fragment and recording the fragment with the video recording apparatus when the fragment is aired.

21. A recording system for recording video data corresponding to fragments wherein each fragment is broadcast to the recording system as a separate and independent program from other related fragments, the recording system comprising:

a signal receiver for receiving a signal that carries programming, wherein said programming includes a fragmented program, which includes a plurality of fragments that are scheduled to be aired over a series of days;

a user input interface coupled to said signal input, wherein said user interface provides a list of categories that correspond to a plurality of fragmented programs, and a fragmented program list that is displayed in response to a user selection of a category from the list of categories, the fragmented program list displaying each of, and only, one or more identified fragmented programs corresponding to the selected category;

wherein upon receipt of additional user input selecting one of the fragmented programs from the user input interface the recording system uses electronic program guide data to identify each of a plurality of fragments of said selected fragmented program, wherein the electronic program guide data used to identify the one or more fragmented programs includes a unique

identifier that is assigned to each fragment in a group of fragments that are designated by a network as being related, such that the unique identifier is common to each fragment within a corresponding grouping of fragmented programs, which are identified by the network as being related, and such that each fragment corresponding to the fragmented program grouping has a same unique identifier that is distinguished and independent from a program title; and

a signal recorder coupled to said signal input for sequentially recording onto a storage medium each of said plurality of fragments.

The Examiner relies on the following prior art references to show unpatentability:

Abbott	US 5,973,679	Oct. 26, 1999
Yi	US 6,094,427	Jul. 25, 2000
Wood	US 2003/0044165 A1	Mar. 6, 2003 (eff. filed Aug. 7, 1998)
Knudson	US 2005/0273819 A1	Dec. 8, 2005 (eff. filed Jun. 11, 1999)

1. Claims 1-5, 9-23, 25, 26, 28-31, and 33-35 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wood, Knudson, and Abbott.
2. Claim 32 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wood, Knudson, Abbott, and Yi.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs<sup>3</sup> and the Answer<sup>4</sup> for their respective details. In this decision, we have considered only those arguments actually made by

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<sup>3</sup> We refer to (1) the Appeal Brief filed November 27, 2006; (2) the Reply Brief filed May 7, 2007; and (3) the Supplemental Reply Brief filed August 28, 2007 throughout this opinion.

<sup>4</sup> We refer to the most recent Answer mailed June 28, 2007 throughout this opinion.

Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

THE REJECTION OVER WOOD, KNUDSON, AND ABBOTT

*Claims 1-5, 9-20, 26, and 28-35*

We first consider the Examiner's obviousness rejection of claims 1-5, 9-23, 25, 26, 28-31, and 33-35 over Wood, Knudson, and Abbott (Ans. 3; Final Rej. 2-10).<sup>5</sup> Regarding representative claim 1,<sup>6</sup> Appellant argues the cited prior art does not teach or suggest the electronic program guide (EPG) data including a unique identifier that is (1) assigned to each fragment related to the selected category; (2) common to each fragment in the category; and (3) distinguished and independent from a program title, as claimed (App. Br. 10-11).

According to Appellant, the Examiner concedes that Wood and Knudson fail to explicitly teach such a unique identifier (App. Br. 11; Reply Br. 3; Supp. Reply Br. 2-3). As such, Appellant focuses the arguments initially on the tertiary reference (Abbott). Appellant contends that Abbott is deficient with respect to the disputed unique identifier limitation since

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<sup>5</sup> We note that the Examiner's Answer does not expressly state the Examiner's grounds of rejection, but instead refers us to a previous office action (Ans. 3-4). Such incorporations by reference, however, are improper under current practice. *See* MPEP § 1207.02 ("An examiner's answer should not refer, either directly or indirectly, to any prior Office action without fully restating the point relied on in the answer.").

<sup>6</sup> Appellant argues claims 1-5, 9-20, 26, and 28-35 together as a group. *See* App. Br. 10-19. Accordingly, we select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Abbott pertains to hierarchical organization and synchronization of program data for a *single program*. As such, Appellant argues, Abbott is not concerned with the relationship between multiple separate programs or fragments (App. Br. 12-13). Although Appellant acknowledges that Abbott teaches that a “series” can be uniquely identified, Appellant emphasizes that the meaning of the term “series” in Abbott pertains to *different portions of the same program*: a meaning that is completely different from that of the present invention which refers to a group of related programs that are aired at different times (App. Br. 13-14; Reply Br. 3; Supp. Reply Br. 3-4; emphasis added). Based on these differences, Appellant argues that the Examiner has not provided a reason that would have prompted ordinarily skilled artisans in the relevant field to combine the teachings of Abbott with Wood and Knudson (Supp. Reply Br. 6-7).

Appellant also argues that the cited prior art fails to generate and display a list of only the identified fragmented programs that correspond to the selected category, as claimed. Appellant contends that the Examiner conceded that Wood fails to disclose such a feature, and thus focuses the arguments initially on the secondary reference to Knudson. According to Appellant, Knudson’s program listings list all the programs scheduled for each channel, not only the fragmented programs related to the selected category as claimed (App. Br. 15-16; Reply Br. 4). Appellant adds that the recording and reminding features in Knudson relied upon by the Examiner pertain to events occurring *after* the user selects the program. But the fragmented program list of the claimed invention, Appellant argues, is displayed *before* the viewer selects a program to record (App. Br. 17).

Lastly, Appellant contends that that the Examiner erred in using hindsight to reconstruct the claimed unique identifier from the cited references. According to Appellant, the Examiner is not merely combining known elements from different references to arrive at the claimed invention. Rather, Appellant argues, the Examiner is piecing together references to construct an *unknown* element, and then combining this constructed unknown element with other elements to arrive at the claimed invention (Supp. Reply Br. 4-5).

In response, the Examiner essentially reiterates the relied-upon teachings of Wood and Knudson, but adds that Abbott assigns a unique identifier to a series (Ans. 5-7). The Examiner then concludes that the disputed limitations would have been obvious to ordinarily skilled artisans in light of the collective teachings of the references (*id.*).

### ISSUE

The issue before us, then, is whether Appellant has shown the Examiner erred in finding that the collective teachings of the cited prior art teach or suggest the limitations of representative claim 1.

The issue turns on whether the prior art teaches or suggests a unique identifier that is (1) assigned to each fragment related to the selected category; (2) common to each fragment in the category; and (3) distinguished and independent from a program title, as claimed. The issue also turns on whether the cited prior art teaches or suggests generating and displaying a list of only the identified fragmented programs that correspond to the selected category, as claimed.



## FINDINGS OF FACT

1. Wood discloses a video data recording system that enables the user to specify criteria for recording shows from an input data source for later playback (Wood, Abstract). Show selection information is based on incoming channel guide data (e.g., program titles, start and end times, channel information, etc.) obtained from channel guide data source 109 that periodically updates the local channel guide database 103 with this information (Wood, ¶ 0027; Fig. 1).

2. The user's program selection criteria are stored in a criteria database 104 (Wood, ¶ 0029). This criteria can include (1) the show title; (2) a keyword such as an actor's name or text from a show description; (3) show class (e.g., action, mystery, etc.); and (4) rating information (Wood, ¶ 0043). The user can also specify, among other things, the number of shows in a series to record and whether reruns are recorded (Wood, ¶ 0044). Alternatively, all shows in a series can be recorded if desired (Wood, ¶¶ 0051-52; Fig. 9).

3. The user can provide selected criteria via user interface 108 (Wood, ¶¶ 0038, 0045). In some embodiments, the user is presented with a pop-up menu that is derived from information contained in the channel guide database (Wood, ¶¶ 0045-46). To simplify the display, various display options can be used including enabling the user to select from a list of letters (A-Z) corresponding to the first letter of the title (Wood, ¶ 0047) and using hierarchical lists (Wood, ¶ 0048). Similar methods can be used for other criteria selections (Wood, ¶ 0049).

4. Recording in Wood is based on matches between the criteria database and the channel guide database. When a match occurs, the

processor 101 causes video input signals to be recorded on video storage 105 (Wood, ¶ 0029; Fig. 1).

## PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Discussing the question of obviousness of a patent that claims a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida v. AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

*KSR*, 127 S. Ct. at 1740. If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements

in the fashion claimed.” *Id.* at 1740-41. Such a showing requires “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

If the Examiner’s burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

## ANALYSIS

Based on the functionality of Wood’s criteria-based recording system noted in the Findings of Fact section above, we find that this reference amply suggests the disputed unique identifier limitation of representative claim 1. First, Wood expressly states that the user can specify recording shows in a series (Wood, ¶ 0044; Finding of Fact (FF) 2). Skilled artisans would understand from this teaching that the individual shows of a particular series would be related “fragments” with respect to that series, particularly in light of the term’s definition in the Specification.<sup>7</sup>

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<sup>7</sup> *See Spec.* 4:15-16 (“A fragmented program is a program that has multiple airings broadcast over multiple days. Each airing is generally referred to as a fragment.”); *see also id.* at 4:21-22 (“An ongoing television program includes a series of episodes that are aired on a regular basis.”).

Second, Wood expressly discloses that the user can select all shows in a series to record (FF 2). One example of this technique is shown in Figure 9 in which all shows (i.e., “fragments”) in the “Scooby Doo” series are selected for recording. Apart from indicating that the shows in this series are selected, Wood does not detail how each fragment is selected. Nevertheless, we find that some sort of unique identifier would be assigned to the shows associated with the selected series to facilitate identifying and selecting those shows for recording. Otherwise, we fail to see how the individual shows of the series could be identified for selection.

Indeed, the display of Figure 9 of Wood at least suggests unique identifiers. As shown in that figure, the very title of the selected series (“Scooby Doo”) is distinguished from the other program titles and therefore constitutes a unique identifier with respect to the other programs. By automatically selecting all shows in this series (i.e., as indicated by the double-dot indicator adjacent the title in Figure 9), skilled artisans would understand that the system would identify and associate the shows pertaining to this selected series as part of this selection process. This identification and association in Wood would therefore involve assigning a unique identifier to the shows for selection.

Although one such identifier that would be common to all shows of a series would be the title of the series itself, skilled artisans would recognize that other common unique identifiers could also be used, such as the *time and channel* that a particular series is aired. For example, in Figure 9 of Wood, the “Scooby Doo” series is shown on Channel 1003 (TBS) from 8:30-9:00 PM. No other series has this unique attribute (i.e., a program aired from 8:30-9:00 PM on Channel 1003). Furthermore, skilled artisans would

recognize that the shows of this recurring series (i.e., the particular episodes or “fragments” of the “Scooby Doo” series) would likewise share this same unique attribute. As such, a particular recurring series (and associated fragments of the series) can be uniquely identified not only by the title of the series, but also by the time and channel that each show of the series was aired—an identifier independent of the program title. We therefore find that Wood teaches or suggests the disputed unique identifier limitations of representative claim 1.

We also find that Wood suggests displaying a fragmented program list, as claimed. As we indicated in the Findings of Fact section, the user in Wood can specify a variety of criteria for recording selected shows including, among other things, keywords and the particular class of the show (FF 2). A recurring series (or a particular type of recurring series) could be such a class (e.g., all recurring series within a particular time slot and/or channel, all recurring series that are comedies, etc.). Furthermore, Wood provides a pop-up menu that can display lists of programs in a simplified manner (i.e., by presenting subsets of information via particular letters, hierarchically, etc.) (FF 3). Based on these teachings, we see no reason why users in Wood could not tailor the displayed programs for selection consistent with series-specific criteria (i.e., to show only recurring series or the desired types of recurring series). Such a feature would, at a minimum, simplify the display by showing only those shows that meet the desired criteria.

In sum, the functionality of Wood teaches or suggests (1) providing a list of categories that can include fragmented programs (e.g., providing an initial menu of categories of shows denoted by first letter, hierarchically,

etc.); (2) identifying the fragmented programs and assigning a unique identifier to each fragment in a group of fragments (i.e., identifying individual shows of a series for selection); and (3) displaying each of the identified fragmented programs corresponding to the selected category in a fragmented program list (e.g., a narrowly tailored list displaying only the selected series).

An example utilizing this functionality is illustrative. Assume that the user in Wood is interested in television series that are animated (e.g., the “Scooby Doo” series in Figure 9). Consistent with this criteria, the initial list of categories (criteria) presented to the user via the pop-up menu could be narrowly tailored to this particular type of series (i.e., animated series). By selecting a *series* as an initial criteria or category, the system would therefore automatically identify all fragmented programs that match the specific criteria specified (i.e., all series that are animated).

The resulting display responsive to this selection could include detailed information about the series as well as the time and channel it is aired.<sup>8</sup> As we noted previously, the fact that the individual shows of the selected series are aired at the same time and on the same channel indicates that they have a unique identifier associated with them. This resulting display would also constitute a “fragmented program list” since it would be tailored to the selected category (animated series) and therefore include only fragmented programs (i.e., all animated series in the database). From this

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<sup>8</sup> Such a display need not be in a chronological program guide format shown in Figure 9 of Wood, but could be in a tabular format listing the individual selected programs such as that shown in Figure 12 of Knudson. Presenting information in this manner would be a predictable variation well within the level of ordinarily skilled artisans.

display of all animated series, the user could then select one or more of these displayed series for recording via a procedure commensurate with that described in Paragraph 0051 of Wood.

We, therefore, find that Wood alone teaches or suggests all limitations of representative claim 1. Since the teachings of Knudson and Abbott are merely cumulative to the teachings of Wood, we need not address Appellant's arguments pertaining to the alleged deficiencies of these additional references.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner's rejection of representative claim 1 based on the collective teachings of the cited prior art. Therefore, we will sustain the Examiner's rejection of claim 1, and claims 2-5, 9-20, 26, and 28-35 which fall with claim 1.

#### *Claims 21-23 and 25*

Regarding representative independent claim 21,<sup>9</sup> Appellant argues that, unlike claim 1, claim 21 requires that upon receiving user selection of one of the fragmented programs, the method uses EPG data to identify each of a plurality of fragments of the selected fragment program (i.e., a unique identifier in the EPG data is used to identify which fragments are related to a fragment program) (App. Br. 19-20; Reply Br. 5).

We are not persuaded by these arguments, however, for the reasons indicated with respect to claim 1 above. Although we recognize the

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<sup>9</sup> Appellant argues claims 21-23 and 25 together as a group. *See* App. Br. 19-20; *see also* Reply Br. 5. Accordingly, we select claim 21 as representative.

distinction between claims 1 and 21 noted by Appellant, we find that the functionality of Wood described above nonetheless amply suggests all limitations of claim 21.

As we indicated previously, the list of categories initially presented to the user in Wood can be limited to fragmented programs (e.g., a particular type of series). Upon selection of such a category, all fragmented programs corresponding to that category would then be displayed (i.e., a “fragmented program list” would be displayed). Upon selection of a particular series for recording (i.e., in a manner commensurate with the procedure described in Paragraph 0051 of Wood), the system can uniquely identify the associated shows of the series not only by the title of the series, but also by the time and channel that each show of the series was aired—an identifier independent of the program title. We therefore find that Wood teaches or suggests all limitations of representative claim 21.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner’s rejection of representative claim 21 based on the collective teachings of the cited prior art. Therefore, we will sustain the Examiner’s rejection of claim 21, and claims 22, 23, and 25 which fall with claim 21.



*Claim 32*

We will also sustain the Examiner's obviousness rejection of claim 32 over Wood, Knudson, Abbott, and Yi (Ans. 3-4; Fin. Rej. 10-11).<sup>10</sup> We find that the Examiner has established at least a prima facie case of obviousness that Appellant has not persuasively rebutted. Once the Examiner has satisfied the burden of presenting a prima facie case of obviousness, the burden then shifts to Appellant to present evidence and/or arguments that persuasively rebut the Examiner's prima facie case. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Appellant did not present any specific arguments pertaining to this rejection or particularly point out errors in the Examiner's reasoning to persuasively rebut the Examiner's prima facie case of obviousness. *See, e.g.*, App. Br. 10 (excluding the Examiner's rejection of claim 32 over Wood, Knudson, Abbott, and Yi in the issues to be reviewed on appeal). Since Appellant has not persuasively rebutted the Examiner's prima facie case of obviousness for claim 32, the rejection of that claim is therefore sustained.

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<sup>10</sup> Although the Examiner rejected claim 32 in the Final Rejection over Wood, Knudson, Abbott, and Yi (Final Rej. 10-11), Appellant incorrectly indicates in the Appeal Brief and Reply Brief that claim 32 was rejected over Wood, Knudson, and Abbott. *See, e.g.*, App. Br. 10 and 15; *see also* Reply Br. 2. The Supplemental Reply Brief does include the Yi reference in connection with the claims rejected by the Examiner, but does not specifically identify claim 32 as the only claim rejected over the Yi reference. *See* Supp. Reply Br. 2.

### CONCLUSION OF LAW

Appellant has not shown that the Examiner erred in rejecting claims 1-5, 9-23, 25, 26, and 28-35 under § 103 over the collective teachings of the cited prior art.

### DECISION

We have sustained the Examiner's rejections with respect to all claims on appeal. Therefore, the Examiner's decision rejecting claims 1-5, 9-23, 25, 26, and 28-35 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

### AFFIRMED

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